

UNITED STATES INTERNATIONAL TRADE COMMISSION

**COMMERCIAL AVAILABILITY OF APPAREL INPUTS (2004):
EFFECT OF PROVIDING PREFERENTIAL TREATMENT TO COTTON SWEATERS
CONTAINING CERTAIN OPEN-END SPUN YARNS FROM
CARIBBEAN BASIN COUNTRIES**

Investigation No. 332-458-022

November 2004



Commercial Availability of Apparel Inputs (2004): Effect of Providing Preferential Treatment to Apparel from Sub-Saharan African, Caribbean Basin, and Andean Countries

U.S. International Trade Commission Investigation No. 332-458-022

Products	Cotton sweaters containing certain open-end spun yarns
Requesting Parties	Bernette Textile Co., LLC, New York, NY
Date of Commission Report: USTR Public	November 23, 2004 November 2004
Commission Contact	Laura Rodriguez (202-205-3499; laura.rodriguez@usitc.gov)

NOTICE

THIS REPORT IS A PUBLIC VERSION OF THE REPORT SUBMITTED TO USTR
ON NOVEMBER 23, 2004. ALL CONFIDENTIAL INFORMATION HAS BEEN
REMOVED AND REPLACED WITH ASTERISKS (* * *).

Summary of Findings

The Commission's analysis indicates that granting duty-free and quota-free treatment to U.S. imports of chief-weight cotton sweaters made in eligible Caribbean Basin countries from certain open-end spun yarns, regardless of the source of the yarns, would likely have no adverse effect on U.S. fiber, yarn, and fabric producers and their workers because there is no known domestic production of the subject yarns or fabric knitted from the yarns. Certain underlying properties of the yarns are patented, and the fiber, yarn, and fabric are all produced under licensing agreements. In addition, the yarn is spun using a proprietary process, which apparently is the subject of a pending or future patent application. Nor do there appear to be any substitutable yarns. Although two U.S. yarn spinners claim that they could make the subject yarns, it appears that they currently do not have the technology in place to do so or in the past have failed to produce the subject yarns to the quality standards sought by the petitioner. The petitioner is the only domestic producer licensed to knit fabric from the subject yarns. The proposed action would also likely have no adverse effect on U.S. sweater producers because imports supply most of the U.S. market for cotton sweaters. Furthermore, the sweaters to be made from the subject yarn are a new product that are intended to target a new, higher-end niche. The proposed action would likely benefit U.S. firms making sweaters in eligible Caribbean Basin countries from the subject yarns, and their U.S.-based workers, as well as U.S. consumers.

Background

On February 2, 2004, following receipt of a request from the United States Trade Representative (USTR), the Commission instituted investigation No. 332-458, *Commercial Availability of Apparel Inputs (2004): Effect of Providing Preferential Treatment to Apparel from Sub-Saharan African, Caribbean Basin, and Andean Countries*, under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)). This investigation provides advice regarding the probable economic effect of granting preferential treatment for apparel made from fabrics or yarns that are the subject of petitions filed by interested parties in 2004 with the Committee for the Implementation of Textile Agreements (CITA) under the "commercial availability"

provisions of the African Growth and Opportunity Act (AGOA), the United States-Caribbean Basin Trade Partnership Act (CBTPA), and the Andean Trade Promotion and Drug Eradication Act (ATPDEA).¹

The Commission's advice in this report relates to a petition received by CITA on October 12, 2004, alleging that certain colored open end spun yarns of a blend of reclaimed and reprocessed staple cotton and acrylic staple fiber cannot be supplied by the domestic industry in commercial quantities in a timely manner. The petitioner requests that the President proclaim preferential treatment for apparel made in eligible CBTPA beneficiary countries from such yarns, regardless of the source of the yarns.²

Discussion of the product

The petition filed by Bernette Textile Co. (Bernette), New York, NY, which designs, manufactures,³ and markets sweaters and other knitwear, describes the subject yarns as colored, open-end spun yarns ranging in size from 6/1 to 18/1 English count (10.16/1 to 30.47/1 metric) and made in a blend of cotton and acrylic staple fibers.⁴ The petition states that these chief-weight cotton yarns are classified in subheadings 5206.11.00 and 5206.12.00 of the Harmonized Tariff Schedule of the United States (HTS), which provide for cotton single yarn (other than sewing thread), containing less than 85 percent cotton by weight, of uncombed fibers, not put up for retail sale.⁵ The yarns will be used by the petitioner to make chief-weight cotton sweaters, which are classified in HTS chapter 61 (apparel, knitted or crocheted) and subject to a general rate of duty of 16.5 percent ad valorem.

Bernette reportedly is the largest sweater supplier to department store and mid-tier retailers.⁶ It is licensed to design and market sweaters containing Smart Fabric Technology® developed and patented by Outlast Technologies, Inc. (Outlast), Boulder, CO.⁷ The technology is embedded in the acrylic staple fibers, which are mixed with reclaimed and reprocessed cotton fibers and spun into yarns (i.e., the subject yarns). The acrylic fibers are made in the United Kingdom under exclusive license from Outlast and contain patented

¹ For more information on the investigation, see the Commission's notice of investigation published in the *Federal Register* of Feb. 9, 2004 (69 F.R. 6003) and consult the Commission's website at www.usitc.gov/332s/shortsup/shortsupintro.htm.

² The President may proclaim such action if (1) he determines that the subject fabric or yarn cannot be supplied by the domestic industry in commercial quantities in a timely manner; (2) he has obtained advice from the Commission and the appropriate advisory committee; (3) he has submitted a report, within 60 calendar days after the request, to the House Committee on Ways and Means and the Senate Committee on Finance, that sets forth the action proposed, the reasons for such action, and advice obtained; (4) a period of 60 calendar days, beginning with the day on which he has met the requirements of (3), has expired; and (5) he has consulted with such committees on the proposed action during the 60-day period referred to in (3). In Executive Order No. 13191, the President delegated to CITA the authority to determine whether particular fabrics or yarns cannot be supplied by the domestic industry in commercial quantities in a timely manner. The President authorized CITA and USTR to submit the required report to the Congress.

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⁴ The English count indicates the number of 840-yard lengths of yarn in one pound (the higher the yarn number, the lighter in weight or finer the yarn). The metric yarn number indicates the number of 1,000-meter lengths of yarn in one kilogram.

⁵ Data on U.S. imports of the subject yarns are not available because the yarns are grouped with other related cotton yarns in HTS subheadings 5206.11.00 (yarns not exceeding 14 nm) and 5206.12.00 (yarns exceeding 14 nm but not exceeding 52 nm). The term "nm" means the number of 1,000-meter lengths of yarn in one kilogram.

⁶ Outlast Technologies, Inc., Boulder, CO, news release, "Outlast Forms Partnership with Bernette Textile Company to Spin Fashionable Sweaters with a Technical Twist," Aug. 11, 2004, found at <http://www.fabriclink.com/pk/newsreleases/Outlast0804.html>, retrieved Oct. 26, 2004.

⁷ Outlast states that it is a privately held U.S. corporation and is the worldwide pioneer in developing unique phase change materials and applications. Outlast has launched its 'Smart Fabric Technology®' in outerwear, footwear, and bedding. Originally developed for NASA, Outlast fibers, fabrics and foams contain patented micro-encapsulated phase change materials (PCMs) called Thermocules®, which store, absorb and release heat, providing increased comfort to consumers. The firm developed its first PCMs in 1994 and launched its first commercial products three years later. Information on Outlast is from John Mitchell, Vice President, Business Development, Outlast Technologies, telephone interview by Commission staff, Nov. 1, 2004, and a company news release, "Outlast Forms Partnership with Bernette Textile Company to Spin Fashionable Sweaters with a Technical Twist," Aug. 11, 2004.

micro-encapsulated "phase change materials" (PCMs) that "store, absorb, and release heat."⁸ According to the petition, garments containing this acrylic fiber are able "to store excess body heat and release it during the day, thereby making the wearer more comfortable than he or she would otherwise be." The petition also notes that the use of this particular acrylic fiber, along with the use of reclaimed and reprocessed cotton, which enables Bernette to market the sweaters as "environmentally friendly,"⁹ provides the firm with "an important marketing advantage with strong appeal to many U.S. consumers."¹⁰ Trade sources note that the subject yarns cost substantially more than similar cotton-acrylic blended yarns made in the United States. The subject yarns cost about \$*** per pound, compared with *** per pound for similar cotton-acrylic yarns made domestically.¹¹ The petitioner states that a sweater made from the subject yarns will likely sell for about \$*** at retail. As discussed later in this report, the higher cost of the subject yarns largely reflects the significant investment made in specialized equipment and production processes to produce acrylic staple fibers with PCMs and blend them into yarns with reclaimed and reprocessed cotton.

The petition states that the sweaters will be cut and assembled in El Salvador from knit fabric made in the United States and El Salvador. ***¹²***¹³***¹⁴*** U.S. sweater production is limited and has been declining in recent years so that imports supply most of the domestic market for sweaters.

Discussion of affected U.S. industries, workers, and consumers¹⁵

In general, the manufacturing progression for sweaters made from the subject yarns is: (1) the reclaimed cotton and the acrylic staple fibers containing PCMs are mixed together and processed (spun) into yarns, (2) the yarns are knitted into fabrics, (3) the fabrics are cut into components, and (4) the components are sewn into finished sweaters.

⁸ The PCMs are very small - most are around 2 microns in diameter. The PCMs are manufactured from a water-based emulsion and so are best suited to acrylic fiber manufacturers that use a water-based solvent system. The micro-capsules need to be prepared as a stable dispersion in the solvent system to be used and they are then introduced into the polymer stream by a late injection system. The acrylic polymer/pcm mixture needs to be mixed immediately before it is extruded through the very small holes of the spin jet. The acrylic fiber is then formed with the micro-capsules as part of the fiber structure. This process requires specialized equipment that costs about \$3 million. John Mitchell, Vice President, Business Development, Outlast Technologies, telephone interview by Commission staff, Oct. 25, 2004; Brad Poorman, "Outlast Forms Partnership with Bernette Textile Company to Spin Fashionable Sweaters with a Technical Twist," news release, Aug. 11, 2004; Roland Cox, Market Development Manager, Amicor, email to Commission staff, Nov. 1, 2004; and Paul Saunders, President & Co-Owner, Sterling Fibers, telephone interview by Commission staff, Nov. 1, 2004.

⁹ The petitioner considers the sweaters "environmentally friendly" because the cotton used in the subject yarns is obtained by "garnetting" cutting scraps left from the production of cotton T-shirts and other cotton knitwear (i.e., recover the fibers from the fabric scraps), instead of incinerating or disposing of the scraps in landfills. Adam Siskind, Chief Financial Officer, Bernette Textile Co., telephone interview by Commission staff, Nov. 12, 2004.

¹⁰ Handtags provided by Outlast to licensees state the following: "This product features Outlast smart fabric technology. It will keep you comfortable by absorbing body heat when you create too much and releasing it when you need it most. By buffering skin temperature, Outlast material reduces overheating and sweating when you're active and prevents chill when you stop. Fabric and insulations stay drier and maintain their effectiveness, so you stay comfortable all day long." Charles Bremer, consultant, on behalf of Bernette Textile Co., email to Commission staff, Nov. 4, 2004.

¹¹ Spiro Pantziris, Chief Executive Officer, Spintex Yarns, Toronto, Canada, telephone interview by Commission staff, Oct. 28, 2004. According to U.S.-based Jimtex Yarns, which spins yarns from reclaimed cotton and standard staple acrylic fiber, ***. Harry Matusow, President, Jimtex Yarns, Philadelphia, PA, email to Commission staff, Nov. 11, 2004.

¹² John Mitchell, Vice President, Business Development, Outlast Technologies, telephone interview by Commission staff, Oct. 27, 2004.

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¹⁵ In general, the manufacturing progression for textiles is: (1) fibers are processed into yarns, (2) yarns are made into fabrics, (3) fabrics are cut into components, and (4) components are sewn into finished goods.

Fiber producers

Commission staff contacted the Fiber Economics Bureau¹⁶ and two acrylic staple fiber producers, Solutia, and Sterling Fibers, Inc.¹⁷ A representative of the Fiber Economics Bureau stated that currently there is no production of acrylic fiber with PCMs in the United States, or in Mexico, "nor is there any probability that production will occur in the future since Acordis of the United Kingdom has an exclusive license to manufacture this specialty acrylic fiber."¹⁸ A representative of Solutia stated that the company does not make the acrylic fiber used in the subject yarns.¹⁹ A representative of Sterling Fibers stated that the firm made acrylic fiber with the PCMs for Outlast Technologies for two years, about three years ago.²⁰ The representative stated that ***21***22***23***24

Yarn producers

Commission staff contacted the National Council of Textile Organizations (NCTO)²⁵ and several U.S. yarn spinners about the subject petition.²⁶ The only U.S. firm identified as currently spinning yarn from a blend of reclaimed cotton and acrylic staple fiber is Jimtex Yarns, Inc. However, a Jimtex representative stated that the firm does not make the subject yarns - - that is, yarns made from a blend of reclaimed cotton and staple acrylic fiber that contains PCMs. According to a Jimtex representative, the company spins yarns from reclaimed cotton and staple acrylic fiber (***) "every day of the week" in its plant in Lincolnton, GA, which opened in 2001 and has been producing cotton-acrylic blend yarns since then. *** The Jimtex representative noted that although production of cotton-acrylic blend yarns requires a specialized process, it is not particularly difficult.²⁷ He asserted that Outlast Technologies is not the only company that can offer fibers with thermostatic properties. He stated that other fibers with such properties include Thermax® and CoolMax®.²⁸ He also noted that Jimtex has a broad inventory of "fashion" colors, at least 50 ***.

¹⁶ The Fiber Economics Bureau is the Statistics division of the American Fiber Manufacturers Association, Inc., the trade association representing U.S. producers of synthetic and cellulosic fibers.

¹⁷ Very little acrylic fiber production remains in the United States.

¹⁸ Frank Horn, President, Fiber Economics Bureau, email to Commission staff, Oct. 29, 2004.

¹⁹ Mark Bass, Business Director- Acrylic Fibers, Solutia, telephone interview with Commission staff, Oct. 29, 2004.

²⁰ Paul Saunders, President and Co-Owner, Sterling Fibers, telephone interview with Commission staff, Nov. 1, 2004.

²¹ John Mitchell, Vice President, Business Development, telephone interview with Commission staff, Oct. 27, 2004 and Brad Poorman, Senior Vice President, Sales and Marketing, Outlast Technologies, telephone interview with Commission staff, Nov. 16, 2004.

²² Sterling and its subsidiaries filed for bankruptcy in 2001. It transferred its acrylic fibers business to local management for a nominal fee. See "Sterling Chemicals, Inc. - Company Profile," found at <http://biz.yahoo.com/ic/51/51332.html>, retrieved Nov. 17, 2004.

²³ Acordis, headquartered in the Netherlands, is a multinational group of businesses supplying customers worldwide with man-made fibers and specialty materials for industrial, textile, medical, and hygiene applications. It has production facilities in Europe, including the United Kingdom, the United States, and South America.

²⁴ Brad Poorman, Senior Vice President, Sales and Marketing, Outlast Technologies, Inc., telephone interview with Commission staff, Nov. 16, 2004.

²⁵ The National Council of Textile Organizations represents the entire textile sector - - the fiber, yarn, fabric, and supplier industries. This organization absorbed the American Yarn Spinners Association, the former national trade association representing the sales yarn manufacturing industry.

²⁶ Except as otherwise noted, the information in this paragraph is from Harry Matusow, President, Jimtex Yarns, Division of Martex Fibers, Southern Corporation, telephone interview with Commission staff, Oct. 21, 2004 and Nov. 10, 2004.

²⁷ Another industry representative stated that there is nothing unique about spinning acrylic fiber with reclaimed cotton. However, she emphasized that spinning the subject yarns from a blend of reclaimed cotton with acrylic staple fiber that contains PCMs embedded into it presents a unique challenge. It took time and considerable financial investment to develop a special process to ensure that the PCMs remained intact and undamaged by the spinning process. The resulting yarn is expensive. Mary Vane, Director-International Trade and Business Development, Invista, telephone interview with Commission staff, Nov. 4, 2004.

²⁸ CoolMax® is a "moisture transport fiber" developed by DuPont that provides wicking capability. It is a four-channel fiber that when spun into a fabric helps wick moisture quickly away from the skin (when the body perspires) to the outer layer of the fabric. CoolMax® is used in men's and women's underwear, hosiery/socks, T-shirts, sports bras, hats/gloves, and

In its written submission to CITA, Jimtex Yarns stated that it has been making "this type of yarn for chief weight cotton sweaters since 1998" and in 2004 supplied colored open-end spun yarn blended from reclaimed and reprocessed cotton and various natural and solution-dyed acrylic staple fiber (known as "PDF") to Bernette Textile Co. for its El Salvador account.²⁹ Jimtex further noted that it has excess manufacturing capacity available to produce even more yarn and could add even more capacity. Jimtex also stated that its yarns are nearly identical in all respects to the yarns manufactured by Spintex, Bernette's Canadian supplier, and further noted that both companies use similar and readily available cotton carding machines and cotton open end spinning machines to produce the yarns. Jimtex also asserted that if requested, it would be able to make this product or a commercial substitute that has similar thermostatic/thermal-regulating/user-comfort properties and that it currently manufactures yarn products utilizing other acrylic fiber technologies.

Commission staff contacted Outlast Technologies for additional details concerning the production of the subject yarns.³⁰ The Outlast representative explained that Outlast licenses all business relationships³¹ with its customers and manufacturers (along the entire production chain) to ***³²*** Outlast sources its acrylic fiber yarn containing PCMs exclusively from Acordis' facility in the United Kingdom. Acordis uses highly specialized equipment that injects the PCMs into the acrylic fiber.

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Views of interested parties

No written submissions were filed with the Commission.

pants/shorts. CoolMax® focuses on moisture management rather than temperature management. Mary Vane, Director-International Trade and Business Development, Invista, telephone interview with Commission staff, Nov. 4, 2004 and DuPont CoolMax Performance Fabrics, "CoolMax, The High Tech Fabric That Keeps You Dry and Comfortable," found at <http://www.fabriclink.com/pk/coolmax/home.html>, retrieved Nov. 4, 2004. Information on Thermax® was not readily available to Commission staff.

²⁹ Information in this paragraph is from Edward J. Farrell and David M. Schwartz, counsel to Jimtex Yarns, written submission to CITA, Nov. 4, 2004.

³⁰ Information in this paragraph and subsequent paragraphs concerning Outlast's licensing arrangements to produce the acrylic fiber with PCMs and to spin the subject yarn from reclaimed cotton and the special acrylic fiber is from Commission staff telephone interviews with John Mitchell, Vice President, Business Development, Outlast Technologies, Inc., Oct. 27-Nov. 10, 2003.

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³² Jeff Siskind, President and Chief Operations Officer, Bernette Textile Co., telephone interview with Commission staff, Nov. 17, 2004 and John Mitchell, Vice President, Business Development, Outlast Technologies, Inc., telephone interview with Commission staff, Oct. 27, 2004.

³³ Spintex Yarns is a leading producer of cotton and cotton blend yarn made primarily from recycled components.

³⁴ About 20 to 30 other companies worldwide reportedly attempted to produce a yarn from a blend of reclaimed cotton with acrylic fibers that contain PCMs. None of these firms was successful. Spiro Pantziris, CEO, Spintex Yarns, Toronto, Canada, telephone interview with Commission staff, Oct. 28, 2004. ***

³⁵ Except where otherwise noted, information in this paragraph is principally from a Commission telephone interview with Spiro Pantziris, CEO, Spintex Yarns, Oct. 28, 2004.

³⁶ Open-end spun yarns, in addition to providing a quicker turnaround than ring spun yarn, also provide the rugged, athletic appearance and harsher hand desired for the sweaters Bernette intends to market to men. Charles Bremer, Consultant, on behalf of Bernette Textile Co., email to Commission staff, Nov. 4, 2004.

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³⁸ John Mitchell, Vice President of Business Development, Outlast Technologies, Inc., telephone interview with Commission staff, Oct. 25, 2004.

³⁹ Charles Bremer, Consultant, on behalf of Bernette Textile Co., email to Commission staff, Nov. 4, 2004.

Probable economic effect advice⁴⁰

The Commission's analysis indicates that granting duty-free and quota-free treatment to U.S. imports of chief-weight cotton sweaters made in eligible CBTPA beneficiary countries from the subject yarns, regardless of the source of such yarns, would likely have no adverse effect on a U.S. domestic industry or its workers, because there currently is no domestic production of fibers, yarns, or knitted fabrics made from a blend of reclaimed cotton and acrylic staple fiber with PCMs. The information available to the Commission suggests that the domestic industry does not have the technology in place to produce the subject yarns. Although U.S.-based Jimtex Yarns asserts that if requested, it would be able to make the subject yarns or a commercial substitute, it currently does not produce the subject yarns or a commercial substitute, and it appears unclear that it would be able to do so in a timely manner. As discussed earlier, it took Spintex Yarns of Canada 18 months and an investment of several hundred thousand dollars to create a unique spinning process to produce the subject yarns. The production processes for the subject yarns that Spintex developed are proprietary and are protected by exclusive licensing arrangements. Spintex has recently initiated efforts to patent its production process for the subject yarn.⁴¹ In addition, although U.S.-based acrylic producer Sterling Fibers attempted to produce an acrylic fiber with the PCMs for Outlast Technologies, Sterling Fibers entered into bankruptcy at that time and was also unable to produce an acrylic fiber with PCMs that could meet Outlast Technologies' quality and performance standards.

Based on information available to the Commission, there also appears to be no substitutable yarns for the subject yarns. As discussed earlier, the subject yarns are sold at a much higher price - - at least double the price of yarns spun domestically from reclaimed cotton and standard acrylic staple fiber. In addition, the subject yarns appear to be the only yarns with both heating and cooling properties, whereas other U.S. yarns made from reclaimed cotton and staple acrylic fiber such as Coolmax® have either one or the other property but not both, or they handle moisture management only.

The proposed preferential treatment would also likely have no adverse impact on U.S. industry because (1) the scope of the petition is narrow, both in terms of the inputs required to produce the subject yarn, and in the end-use application (sweaters) in contrast to the wider set of end use-applications (e.g., socks, underwear, and sweaters) for domestically produced cotton-acrylic yarns, (2) the end-use target markets are different - - mid-tier and better department stores for the sweaters made from the subject yarns versus mass-market discounters for the garments made from domestic cotton-acrylic yarns, and (3) because the cotton sweaters to be produced from the subject yarns appear to represent a new product that is not yet in full production and will not be sold at retail until the fall of 2005.

The proposed preferential treatment would likely have no adverse effect on U.S. sweater producers and their employees because imports supply most of the domestic market for cotton sweaters. *** Furthermore, the production of the sweaters from the subject yarns will target a small, high-end segment of the U.S. sweater market (with a price point averaging \$****⁴²) and the expected increase in imports of sweaters made in eligible CBTPA countries from the subject yarns would at most, possibly displace a small level of other imported sweaters or simply slightly increase the overall level of U.S. sweater imports. The proposed preferential treatment also would likely benefit U.S. consumers of sweaters made from the subject fabrics to the extent that importers pass on some of the duty savings to retail consumers and also to the extent that they take advantage of a new product line made available to them.

⁴⁰ The Commission's advice is based on information currently available to the Commission.

⁴¹ Spiro Pantziris, CEP, Spintex Yarns, telephone interview with Commission staff, Nov. 18, 2004.

⁴² Jeff Siskind, President and Chief Operations Officer, Bernette Textile Co., telephone interview with Commission staff, Nov. 17, 2004.